

IN THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method for evaluating the performance of an anion exchange resin, comprising the steps of:

~~selectively~~ measuring an inorganic carbonic acid concentration in an outlet water of an ion exchange resin vessel filled with at least an anion exchange resin, by using an electric conductivity sensor with a gas permeation membrane, thereby avoiding influences from other acid ions; and

evaluating a performance of the anion exchange resin filled in said ion exchange resin vessel based on the measured inorganic carbonic acid concentration in the outlet water.

2. (Previously Amended) The method according to claim 1, further comprising the steps of:

measuring an inorganic carbonic acid concentration in an inlet water of said ion exchange resin vessel; and

evaluating the performance of said anion exchange resin based on the inorganic carbonic acid concentrations of said outlet water and of said inlet water.

3. (Previously Amended) The method according to claim 1, wherein said inorganic carbonic acid concentration is continuously measured.

4. (Previously Amended) The method according to claim 1, wherein said

inorganic carbonic acid concentration is intermittently measured.

5. (Previously Amended) The method according to claim 2, further comprising the steps of:

calculating an MTC (Mass Transfer Coefficient) of said anion exchange resin with respect to the inorganic carbonic acid from the measured inorganic carbonic acid concentrations of the inlet water and of the outlet water of said ion exchange resin vessel; and

evaluating the performance of said anion exchange resin based on the obtained MTC.

6. (Previously Amended) The method according to claim 5, further comprising the steps of:

evaluating a degree of degradation of said anion exchange resin from said MTC; and

judging at least one of a replacement timing, a lifetime, and a throughput capacity for said anion exchange resin.

7.-13. (Cancelled)

14. (Currently Amended) A performance evaluation apparatus for anion exchange resins, comprising:

an outlet monitoring device for ~~selectively~~ measuring an inorganic carbonic acid concentration of an outlet water of an ion exchange resin vessel filled with an anion

exchange resin, by using an electric conductivity sensor with a gas permeation membrane, thereby avoiding influences from other acid ions; and

an evaluation device for evaluating a performance of the anion exchange resin filling said ion exchange resin vessel based on the measured inorganic carbonic acid concentration of the outlet water measured by said monitoring device.

15. (Previously Amended) The apparatus according to claim 14, further comprising:

an inlet monitoring device for measuring an inorganic carbonic acid concentration of an inlet water of said ion exchange resin vessel; wherein said evaluation device evaluates a performance of said anion exchange resin based on the inorganic carbonic acid concentrations of said outlet water and of said inlet water.

16. (Previously Amended) The apparatus according to claim 14, wherein said outlet monitoring device continuously measures the inorganic carbonic acid concentration of said outlet water.

17. (Previously Amended) The apparatus according to claim 14, wherein said outlet monitoring device intermittently measures the inorganic carbonic acid concentration of said outlet water.

18. (Previously Amended) The apparatus according to claim 15, wherein said evaluation apparatus calculates MTC (Mass Transfer Coefficient) of said

anion exchange resin with respect to the inorganic carbonic acid from the measured inorganic carbonic acid concentrations of the inlet water and of the outlet water of said ion exchange resin vessel, and evaluates the performance of the anion exchange resin based on the obtained MTC.

19. (Previously Amended) The apparatus according to claim 18, wherein said evaluation apparatus evaluates a degree of degradation of the anion exchange resin from said MTC and judges at least one of a replacement timing, a lifetime, and a throughput capacity for said anion exchange resin.

20. (Previously Amended) The apparatus according to claim 14, wherein said ion exchange resin vessel is a condensate water demineralization vessel of a condensate water demineralization system.

21.-23. (Cancelled)